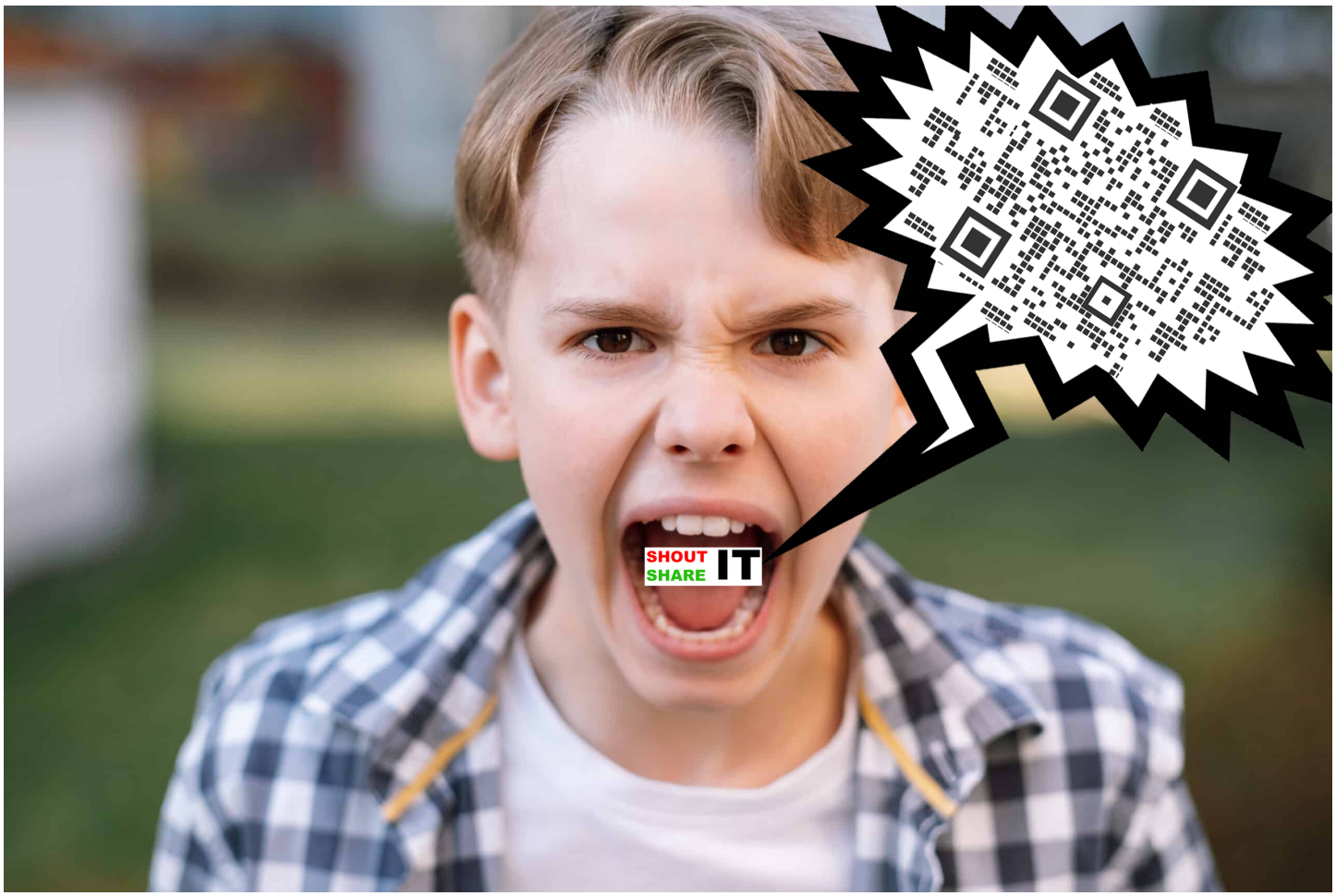
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BULLETIN OF THE
U.S. DEPARTMENT OF AGRICULTURE

No. 83

Contribution from the Office of Experiment Stations, A. C. True, Director.
April 22, 1914.

FARMERS' INSTITUTE AND AGRICULTURAL EXTENSION WORK IN THE UNITED STATES IN 1913.

By JOHN HAMILTON, *Farmers' Institute Specialist.*

Reports on farmers' institute work for the year ended June 30, 1913, were received from all the States except Virginia and Washington, the Territory of Hawaii, and the island of Porto Rico. Institutes were held in all the States and Territories except Louisiana, Nevada, Alaska, and Porto Rico. In Louisiana, although a small appropriation is made to the department of agriculture for institute purposes, yet no institutes were held because of the insufficiency of the funds available. Meetings, however, of institute character were conducted by the agricultural college and experiment station. Detailed data regarding institutes are given in the table at the end of this report (pp. 26–33). The more important facts are summarized below.

PROGRESS OF FARMERS' INSTITUTES IN 1913.

The total number of regular institutes held in 41 States during the year was 7,926, of which 6,747 were general, 1,098 women's, and 81 young people's institutes. The total time devoted to institutes was 10,578 days, an increase of 387 days over that reported for the previous year. There was a total attendance at these institutes of 2,897,391, an increase of 7.6 per cent over that of the previous year. Young people's institutes were held in four States and covered 89 days, with an attendance of 22,100. Women's institutes were held in 12 States covering 1,323 days, with an attendance of 84,039—a marked advance over the previous year.

In addition to the regular institutes, there were various activities classed as special institutes, which included 187 movable schools, held in 13 States, occupying 949 days, with an attendance of 85,637; 25 educational trains in 15 States, covering 24,725 miles, carrying 422 lecturers, making 993 stops for meetings and reaching 501,523 persons; 768 so-called independent institutes in 10 States, attended

NOTE.—This publication is of interest to farmers' institute workers in the United States and Canada.

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by 197,848 persons; 66 "round-up" institutes in 16 States, with an attendance of 122,400 persons; and 346 farmers' picnics, fairs, conventions, etc., visited and addressed by farmers' institute lecturers, with an attendance of 95,209 persons. Of the movable schools, 50 were for women and covered 362 days, with an attendance of 11,502; 14 were for young people, covering 70 days and having an attendance of 1,344.

The total reported attendance at regular and special farmers' institutes in 41 States was 3,900,008 as compared with an attendance of 4,029,546 in 45 States reported the previous year. There was a falling off in the attendance upon special institutes in 1913 of 447,730, due to the fact that fewer educational trains were run than during the previous year. The average attendance per train, however, was larger than in 1912. In a number of States the educational train seems to have served its purpose as an advertising agency and is being replaced by the more localized and systematic forms of itinerant work.

The total fund reported as available for farmers' institutes, $510,784, was somewhat less in 1913 than during the previous year. The amount reported as expended for institute purposes was $474,384, or an average of about $23 per institute session as compared with $25 the previous year.

During the year 33 agricultural colleges and experiment stations furnished 415 lecturers at farmers' institutes, and 28 of these institutions report 2,950 days of time given to institute work by their representatives. This shows a falling off of 59 lecturers in the number furnished by the colleges and a reduction of 5.7 days of time for each lecturer during 1913 as compared with the previous year. This is no doubt due to the rapid expansion of the extension feature in the colleges which is now taking the time of college instructors and diverting their efforts from the institutes to the other forms of extension work. This withdrawal, however, does not seem to have diminished the total number of lecturers on the institute force in the several States, the reports showing 1,036 persons listed in 1913 as regularly employed by the State directors as lecturers.

Institute directors in 13 States report that 63 of their instructors gave 385 days of time to teachers' institutes, meeting at these institutes a total of 36,819 persons. Eighty-one persons gave 347 days of time to high-school instruction, meeting 43,191 persons. Twenty-five men gave 41 days to instruction in the normal schools, meeting 16,258 persons. Forty men devoted an aggregate of 387 days to lecturing in the rural public schools, meeting 64,420 children. One hundred and twenty-five men gave 18,439 days to itinerant work among the farmers, giving advice and conducting demonstrations, and 97 men gave 1,824 days to other forms of extension work.

GROWTH OF THE INSTITUTES DURING THE LAST DECADE.

The growth of the farmers' institute movement in the United States during the last 10 years is noteworthy. In the season of 1902–3 there were held 9,570 sessions of institutes in 41 States. In 1912–13 there were held 20,640 sessions, an increase of 115 per cent. The attendance in 1902–3 was 904,654; in 1912–13 it was 2,897,391 at the regular institutes, and at the special institutes 1,002,617; an increase at the regular institutes of 220 per cent and in all forms of institutes 331 per cent. The average attendance at each session increased 49 per cent, or from 94.53 to 141. The appropriations increased from $187,226 to $510,784, or 172 per cent. During this period there have developed also the extension departments of the agricultural colleges, which last year reached directly about three millions of people with agricultural information.

The following table shows details of the progress of farmers' institute work from 1903 to 1913:

Progress of the farmers' institute work from 1903 to 1913.

Year.	Regular institutes.					Special institutes, attendance.	Aggregate for all forms of institutes.
	Number of half-day sessions.	Number of States and Territories reporting.	Attendance.	Average attendance per session.	Appropriation.		
1903	9,570	41	904,654	94.53	$187,226	.....	.....
1904	10,622	44	841,698	76.41	212,611	.....	.....
1905	10,555	46	995,192	94.28	225,738	.....	.....
1906	11,409	46	1,299,172	114.00	269,671	326,250	1,625,422
1907	11,514	45	1,596,877	138.80	284,450	149,449	1,746,326
1908	14,934	44	2,098,268	140.00	325,569	340,414	2,438,682
1909	15,535	47	2,240,925	144.00	345,666	617,954	2,858,879
1910	16,586	46	2,395,508	144.00	432,374	537,336	2,932,844
1911	16,741	45	2,291,857	138.00	432,693	1,323,693	3,615,550
1912	19,430	45	2,549,199	131.00	533,972	1,480,347	4,029,546
1913	20,640	41	2,897,391	141.00	510,784	1,002,617	3,900,008

This table indicates a steady advance in all directions during the period named. The farmers' institute has shown this steady growth year by year, notwithstanding the rise of many other agencies for rural betterment that have appeared in the last decade. The inherent quality that has enabled the institute not only to hold the interest but to increase the number of its constituency until now it reaches annually about four millions of rural people in the United States is that it meets a need of rural men and women that no other agency has yet been able to supply, viz, a public forum where the scientist and the common man can meet on equal footing and discuss their problems face to face.

It should be noted also that this entire movement has been initiated and conducted without national appropriation for its support and with a minimum amount of departmental aid, thus exhibiting an

initiative vitality and capacity for service to the great body of farmers that no other institution for agricultural improvement in this country can boast.

ADMINISTRATIVE METHODS.

During the past year a request was sent out to the State farmers' institute directors for complete sets of their forms in use in conducting their work—for copies of their instructions to their lecturers and local representatives, advertising posters, postal-card notices, etc., as well as forms of reports by the local managers and institute lecturers on the progress of the work.

There was a very general response to the request. As was to be expected, the methods in use in conducting the work varied in the several States. Where the States were small and all localities easily reached the methods were extremely simple. Where, on the other hand, the States were large and the work correspondingly extended the administrative methods were more elaborate.

An examination of these reports would seem to show that the following facts underlying all institute work should be recognized in planning for conducting it:

(1) That all local people should be fully informed as to the places, dates, and character of the institutes to be held in their community, and that this information should be given widely enough and far enough in advance to enable proper preparations to be made for holding the meeting successfully.

(2) That it is due those furnishing the funds for institute support, whether derived from private or public sources, that the general public, in whose interest the money is given, should have opportunity to enjoy the advantages of the institute. In order to do this, the institute must be thoroughly and effectively advertised.

(3) That this advertising can not be left to chance, but must be systematically undertaken and be prosecuted by individuals directly interested if the meetings are to be a success from the point of view of attendance.

(4) That in order that the State institute director may be informed as to the progress of the work, reports upon the following items are necessary: On attendance, interest manifested, officers selected, expense of conducting the work, plans for the ensuing year, the capability and acceptability of the lecturers, the capability of the presiding officer, the names of influential local people in attendance, subjects discussed, results obtained, amounts contributed by local people, as well as amounts received from other sources.

(5) Detailed information is also needed respecting instruction trains run, movable schools held, round-up institutes, independent institutes, schools aided, local assistance rendered, demonstrations conducted, special institutes, etc.

(6) That the information needed at headquarters for a proper understanding of the institute work is the same as if the director had been present in person at each meeting to observe for himself, or information the same as is needed by the head of a department store or other great enterprise in order to direct it intelligently and to secure its efficiency and success.

(7) Whatever letters of instruction, reports, and advertising methods, therefore, are necessary for securing this information satisfactorily and fully should be adopted and used if the director is to supervise his institute operations intelligently or is to be able to render proper account of his administration of his office and of the funds intrusted to his disposal for institute support.

(8) The reports showed that several States have worked out systems of administration and reporting that are quite complete and in many respects are worthy of imitation. Indiana, Michigan, Pennsylvania, Kansas, Nebraska, New York, and Ohio are among the number.

That there is great need of a careful study of administrative methods, with a view to securing greater efficiency and economy in the use of funds available for institute purposes, is indicated by figures giving the cost of institutes in the United States as a whole and in the different States, as shown in the following table:

Number of days and cost of institutes held in the United States in 1912.

State.	Days of institutes in 1912 and their cost.			State.	Days of institutes in 1912 and their cost.		
	Days.	Total cost.	Average cost per day.		Days.	Total cost.	Average cost per day.
Alabama	33	$1,600.00	$48.48	Nebraska	332	$18,300.00	$55.12
Arizona	65	1,650.00	25.38	New Hampshire	19	1,600.00	84.21
Arkansas	213	4,000.00	18.77	New Jersey	51	2,500.00	49.02
California	129	15,000.00	116.28	New York	437	27,009.00	61.80
Colorado	150	5,159.00	34.39	North Carolina	491	9,530.00	19.40
Connecticut	23	819.15	35.61	North Dakota	61	11,000.00	180.32
Delaware	23	950.00	41.30	Ohio	682	27,400.00	40.16
Florida	37	8,000.00	216.21	Oklahoma	614	10,500.00	17.10
Georgia	103	7,500.00	72.81	Oregon	77	6,100.00	79.22
Idaho	48	4,900.00	102.08	Pennsylvania	429	25,500.00	59.44
Illinois	421	35,950.00	85.39	Rhode Island	28	485.21	17.33
Indiana	532	18,750.00	35.24	South Carolina	191	3,400.00	17.80
Iowa	240	37,245.22	155.19	South Dakota	302	13,000.00	43.04
Kansas	451	18,000.00	39.91	Tennessee	93	5,000.00	53.76
Kentucky	119	14,200.00	119.32	Texas	744	17,500.00	23.52
Maine	119	3,000.00	25.21	Utah	297	11,000.00	37.03
Maryland	63	6,000.00	95.23	Vermont	38	3,000.00	78.94
Massachusetts	138	2,751.28	19.94	Washington	104	10,000.00	96.15
Michigan	590	9,000.00	15.25	West Virginia	204	8,203.20	40.21
Minnesota	327	25,991.22	79.48	Wisconsin	353	19,688.89	55.77
Mississippi	258	17,900.00	69.38				
Missouri	314	8,750.00	27.86	Total	10,089	487,832.17	48.35
Montana	146	10,000.00	68.49				

This table indicates in brief that the cost per institute day varied widely, the average for the United States as a whole being $48.35. While it is true that the expenditures credited to some of the States

in this table were not wholly for institutes proper, a considerable amount going for instruction trains and similar activities, this apparently does not fully explain the great diversity shown. If the Michigan rate of $15.25 had prevailed throughout the country the number of institute days could have been 31,989 instead of 10,089.

A much lower rate than that of Michigan is reported for the women's institutes of Ontario, namely, $3.16 per meeting, of which only $2.40 was supplied by the provincial government, the rest being raised locally. The low cost of these institutes seems to be due in large measure to efficient organization and local initiative. District organizations coextensive with the electoral districts are supplemented by branch societies, each consisting of small local women's clubs throughout the district holding monthly meetings. The members pay annual dues, and other funds for club purposes and for local public improvements are raised in various ways. The strength of the organization is in the fact that the members live in the community, meet frequently, and are active throughout the year. They are not dependent on outsiders who come and go, as are the institutes in most of the States, but they are largely self-sustaining and self-reliant. The fact that 85 per cent of the women's institutes held in Ontario in 1912 were conducted with comparatively little outside aid is proof of the fact that independence, the result of self-support, is possible in the farmers' institute work if proper organization is had for the promotion of this spirit.

The need for multiplying the number of institutes in the United States is such at present that most careful attention to the whole matter of proper organization to supply this need is a paramount duty on the part of those who have control of the institutes in the several States, and the example of Canada in the conduct of its women's institutes and of Michigan in the conduct of its general institute operations are worthy of careful study. The county institute with local branches in every community meeting monthly is the ideal organization both for economy and efficiency for which the institute directors should strive.

The farmers' institute can no longer content itself with the simple discussion of agricultural topics. It is not sufficient that it be merely a debating society or agricultural lyceum. Moreover, it can no longer be an occasional visitor. It must live in the community. If it is to develop local forces, and that is its mission, it must be in daily and hourly contact with those forces. It must take up its abode with those whom it is to benefit, and teach, demonstrate, and guide in the things that it recommends. This means that permanent organizations must be formed in every community.

The institute must identify itself with local people and get to work at once in the community if it is to survive as an educational force.

The statement made before the Country Life Commission of Wisconsin in 1911 by Mr. E. L. Morgan is unquestionably true that "after all the only forces that can deal constructively with rural life are the local forces developed." When this comes to be generally realized and appreciated by extension directors as a fundamental truth, efforts will be made to organize and foster societies for rural betterment in every community in every State.

ASSOCIATION OF FARMERS' INSTITUTE WORKERS.

The eighteenth annual meeting of the American Association of Farmers' Institute Workers was held at Washington, D. C., November 10–12, 1913. Representatives were present from 32 States, 3 of the Provinces of Canada, the District of Columbia, and the islands of Porto Rico and Hawaii.

Reports upon the progress of the work were received from 39 States and Provinces. These showed increased attendance during the year and general interest in the work. Reports from the various standing committees were presented upon the following topics: Institute organization and methods, institute lecturers, cooperation with other educational agencies, movable schools of agriculture, young people's institutes, and women's institutes. Each year the reports of the standing committees become more helpful in solving the difficulties that institute directors and lecturers encounter in the prosecution of their work. This year the committee on organization and methods called attention specially to the extreme importance of having in each unit or district a strong local organization. This was regarded as essential if the institute movement was to become most highly beneficial to the great body of agricultural people.

The value of demonstration as a method of conveying information was also emphasized.

In an extended investigation by the committee on institute lecturers it was found that the average number of lecturers present at each institute throughout the country was 3. Fifteen States reported laboratory exercises in stock judging and household art. Movable schools averaged 5 days in duration with from 4 to 12 teachers for each, the average number of teachers being 5.7. From 20 to 25 per cent of the lecturers are employed by the year. The average age of greatest usefulness in an institute lecturer is between 40 and 50 years, and it was held by all of those reporting that he should have had farm experience.

The committee on cooperation with other agencies recommended that a local or district agricultural council should be organized to direct extension activities in each district, so as to coordinate the work and prevent overlapping.

The committee on institutes for women reported general expansion of institutes of this character, until now most of the State directors report some attention being given to home conditions and woman's life and work. Others report "we are just ready to start." Among the suggestions for the improvement of the work are trained neighborhood visitors, the organization of home-makers' clubs, and the making available of literature giving information respecting home improvement.

One of the significant features of women's work is the enlarging of its scope to include the interests of young girls. In some States girls' canning clubs, bread-making clubs, athletic clubs, and literary clubs are being organized, all designed to arouse and hold the interest and activities of young girls in rural life and its pursuits.

The committee on boys' and girls' institutes summed up its report as follows: States holding special junior institutes, 8; those holding special sessions at regular institutes, 12; those having junior auxiliary institutes, 5; those holding special junior short courses, 8; those having junior sessions at summer short courses, 12; those having regular boys' and girls' club organizations, 36; those conducting junior correspondence courses, 8. The committee reported also that junior encampments seem to be growing in popularity. A criticism was made of the practice sometimes followed of enrolling large numbers in these clubs and requiring no service. It was recommended that members of these clubs not regularly reporting at least once in two months should have their names dropped from the roll.

The "program" of the meeting of the association was divided into four distinct groups—a general session, a special session, a women's session, and a round-table discussion. Eighteen papers in all were presented at these several meetings and discussed.

The president, in his address, spoke particularly of the need for enlisting the cooperation in this institute movement of all classes of citizens, the town resident as well as the people of the rural districts, bankers and business men as well as farmers. He asserted that all were affected directly by the condition of agriculture, and all should, therefore, aid in its improvement.

The officers elected for the coming year were: President, Edward Van Alstyne, Albany, N. Y.; vice president, W. J. Black, Winnipeg, Canada; secretary-treasurer, L. R. Taft, East Lansing, Mich.; executive committee, A. L. Martin, Harrisburg, Pa.; T. B. Parker, Raleigh, N. C., and Mrs. F. L. Stevens, Mayaguez, P. R.

EXTENSION WORK BY THE AGRICULTURAL COLLEGES.

Data regarding extension work by the agricultural colleges in all of the States and Territories except Alaska, Arkansas, Colorado, Hawaii, Maryland, Nevada, South Carolina, South Dakota, Vermont,

Virginia, and Washington are summarized in the table at the end of this report (pp. 34–41), and in less detail in the tables below:

Formal teaching as conducted by the extension departments of the agricultural colleges.

Kinds of schools.	Number in instruction force.	States reporting.	Days of service.	States reporting.	Persons taught.			
					Registered.	States reporting.	Unregistered.	States reporting
Movable schools	296	25	5,436	26	72,319	22	100,253	11
Correspondence schools	75	12	1,889	8	7,649	12	650	2
Rural study clubs	26	6	1,227	6	19,669	5	3,540	2
Normal schools	23	7	242	7	9,084	5	595	2
High schools	97	11	942	8	5,720	4	16,757	5
Total			9,736		114,441		121,795	

Informal teaching as conducted by the extension departments of the agricultural colleges.

Methods employed.	Number engaged.	States reporting.	Days of service.	States reporting.	Places visited.	States reporting.	Attendance.	States reporting.
Local advisers	298	24	4,995	13	1,933	9	7,888	5
Itinerant lecturers	426	25	6,154	15	4,012	18	590,570	18
Educational trains	175	22	1,193	19	1,244	20	491,519	20
Rural club work	113	28	4,570	17	2,057	11	179,133	12
Demonstration:								
In fields	157	26	18,442	18	42,724	16	240,734	12
In animal husbandry	56	17	2,676	11	498	10	312,676	7
In home economics	50	14	1,241	10	575	9	46,486	8
Miscellaneous extension service	359	12	2,372	10	1,644	10	1,073,652	9
Total			41,643		54,687		2,942,658	

Publications issued by the extension departments of the agricultural colleges.

Character of publication.	Number issued.	States reporting.	Pages.	States reporting.
Press bulletins	413	21	1,079	17
Bulletins and leaflets	102,323	25	3,443	26
Courses of study	199	9	1,275	7
Outlines and reports	19	7	124	6
Total	102,954		5,921	

Financial statement of the extension departments of the agricultural colleges reporting.

Source of income.	Amount.	States reporting.
State appropriations	$663,316.00	33
Local contributions	160,404.57	17
Other sources	166,783.63	19
Total (37 States reporting)	990,504.20	
Cost last year	761,113.53	32
Appropriation 1913–14	718,835.00	29

There was general expansion of the extension work of the colleges during the past year. The increase in number of persons engaged in this work was 66 and in the amount of time given to the work over 50 per cent, while the increased amount of time devoted by each person to extension work averaged 27.6 per cent. Thirty-one of the colleges employed 182 persons for their whole time, an average of 5.87 persons per institute, while the number employed for part of their time amounted to 217. The amount of money appropriated increased from $548,352.82 in 1912 to $990,504.20 in 1913.

The days of service devoted to movable schools increased from 2,386 to 5,436 and the registered attendance from 36,241 to 73,319. The States reporting correspondence schools in 1912 were 7; in 1913, 12. The days of service devoted to this work in 1912 were 656; in 1913, 1,889; and the number of students registered increased from 2,162 to 7,649.

The States reporting rural study clubs in 1912 were 2; in 1913, 6. The registered attendance had increased from 2,060 in 1912 to 19,669. The number of local advisers in 1912 was 82; in 1913 there were 298; itinerant lecturers had increased from 322 to 426; the places visited by those engaged in informal teaching in 1912 was 12,142; and the persons in attendance, 1,800,513; in 1913 the places visited numbered 54,687; the persons reported in attendance, 2,942,652.

The number of publications issued had increased from 1,949 to 102,954.

It is clear that the extension work of the agricultural colleges is developing very rapidly and along a wide range of effort and that the different institutions are endeavoring to introduce forms of service along extension lines that will be specially adapted to the conditions in their several States.

SECTION ON EXTENSION WORK OF THE ASSOCIATION OF AMERICAN AGRICULTURAL COLLEGES AND EXPERIMENT STATIONS.

At meetings of this section at Washington, D. C., November 12 and 13, 1913, the following topics were discussed: (1) Organization in a college for extension; (2) problems confronting the agricultural colleges in their extension work and suggestions for meeting them; (3) things the college should undertake to accomplish through its extension division and how they should be undertaken; (4) cooperation with other agencies in agricultural extension; and (5) organization in a county or community for extension. The papers and the discussion of them are published in full in the proceedings of the association.

Two very important reports were presented by committees appointed at the Atlanta meeting of the association: One, a committee on organization of courses for preparation of extension workers; the

other, a committee on types of organization. The chairman of the first committee presented a set of tables showing the results of the investigations of the committee respecting the kind of preparation desired by the colleges. As to practical farm experience, the great majority were in favor of this experience as an accompaniment of collegiate training. The second table gave an outline of the courses of study at present required for the preparation of extension workers. In this English predominated, followed by natural science, studies in chemistry, physics, zoology, physiology, and bacteriology. By far the greatest attention was given to chemistry in this preparation. The third group related to lines of work offered by the colleges. Of those reporting, 37 offered work in agronomy, 36 in horticulture, 34 in animal husbandry, 30 in soil management, 17 in farm engineering, 32 in farm management, 27 in home economics, 31 in farmers' institutes. In all, 17 subjects were enumerated, the number of colleges presenting them varying from 17 to 37.

A permanent committee on extension organization and policy was appointed, consisting of W. D. Hurd, Amherst, Mass., three years; K. L. Hatch, Madison, Wis., two years; and G. I. Christie, Lafayette, Ind., one year. The following officers of the section were chosen for the ensuing year: President, W. D. Hurd, Massachusetts; secretary, E. G. Peterson, Utah; recording secretary, John Hamilton, Washington, D. C.

ILLUSTRATED LECTURES.

The series of illustrated lectures issued by this office has abundantly proven its right to a place in itinerant instruction in agriculture. During the past year, from November 1, 1912, to October 27, 1913, the 14 illustrated lectures published by the department were out in use 4,962 days, and a large number of applications for their use was refused on account of inability to supply the lantern slides accompanying the lectures.

CORRESPONDENCE SCHOOLS.

During the year two classes in correspondence work were organized and operated in cooperation with the Pennsylvania State College, one for men and the other for women. The class for men consisted of 21 members and that for women of 15. The classes at the outset engaged to meet twice each week and to continue the study according to the plan outlined by this office, the work to be in charge of a local lay reader under the general supervision of the college of agriculture.

The classes were organized by a member of the institute office visiting the college, and with the advice of the extension director locating the school, enlisting members for the courses, and selecting leaders to supervise the work. This department officer remained on

the ground during most of the continuation of the school as an observer to see the character of the work and to note such defects in its operation as might occur.

After witnessing the progress of the classes for three consecutive weeks this officer reports that the experiment up to that time was successful in every respect. The lay leaders were fully able to oversee the work. The members of the classes were thoroughly interested in the reading and practice exercises. The weekly written examination as reviewed by college experts showed that the students comprehended what they had studied, although some had difficulty in expressing their thoughts clearly in writing owing to their lack of training in this direction. The oral examinations, however, were uniformly good and the attendance was prompt and satisfactory.

AID TO AGRICULTURE BY TRANSPORTATION COMPANIES.

During the year data were collected from railroad presidents and industrial agents in the United States regarding the character of the extension work in agriculture pursued by the roads, viz: (1) Information giving, (2) aid in marketing products, (3) soil improvement, (4) demonstration work, (5) organizing agricultural associations, (6) operating agricultural instruction trains, (7) other activities, and (8) results accomplished.

Returns were received from 57 roads. The mileage represented by these roads was 152,492, or 61 per cent of the mileage of the railroads of the United States operated in 1912. Thirty companies have industrial departments giving special attention to the development of agriculture and employ 144 men in this service. One road reports a force of 45 experts in the employ of the company during the entire year, giving attention to the development of agricultural extension and demonstration work.

Twelve railroad companies each conducted one or more demonstration farms. One has demonstration plats on 133 farms and another conducts 16 farms for demonstration purposes and still another cooperates with 400 farmers in demonstration work. One company furnishes land to farmers for use as demonstration plats. One road reports having organized a farm improvement department consisting of a manager, three assistant managers, and 29 field agents. There is a dairy agent with 7 assistants, and a car fitted up as a model farm dairy at their disposal. There is also a live stock agent with three assistants, and four market agents.

Of the 57 companies reporting, 41 give particulars respecting their work in the dissemination of information, 29 with respect to marketing, 26 on soil improvement, 22 on demonstration work, 17 in organizing agricultural associations, 41 in operating agricultural instruction trains, 28 enumerate other extension activities not embraced by the

other queries, and 26 report satisfaction with the results accomplished.

The transportation companies are evidently awake to the importance of increasing production, partly in that it provides subsistence for the rapidly increasing population, but mainly in its effect upon the revenues of these corporations. Whatever motive may be assigned for the interest that they have manifested, the fact is that much has been accomplished by them in promoting a better agriculture and in securing cordial feeling and close cooperation between these companies and the individual farmer.

AGRICULTURAL EXTENSION WORK IN FOREIGN COUNTRIES.

In order that institute directors and lecturers may be kept informed the following notes by the assistant farmers' institute specialist showing the progress of agricultural extension in foreign countries during the past year are presented:

ENGLAND.—In a memorandum recently issued by the Board of Agriculture and Fisheries to local authorities in England and Wales, grants are offered from a newly established fund known as the "development fund" for use in the furtherance of technical instruction in agriculture and horticulture.

The grants are declared to be in aid first: "For the establishment of advisory councils to be set up in each county or group of counties for the purpose of reviewing, governing, coordinating, or initiating schemes for providing higher agricultural education and educational experiments in connection therewith." Second. "For the provision and maintenance of buildings and lands for farm schools and farm institutes at which young agriculturists and others whose daily business is connected with the land may obtain scientific and practical instruction in the technicalities of their art."

At each of these schools and institutes it is intended that a highly efficient staff shall be maintained to give short courses of instruction suited to the requirements of the district, and also to conduct experimental and research work

The classes and courses of instruction which the Board of Agriculture and Fisheries aids are for "persons of 16 years of age or more who have finished their school education and are either pursuing technical studies with a view of becoming agriculturists, or are already engaged in agriculture and desire to improve their knowledge of the subject."

Prof. T. H. Middleton in his introduction to the report states that it is clearly the duty both of the central and local authorities to devise means for applying to practical farming the knowledge provided by workers in research institutions. He states that until the knowledge of the laboratory has been translated into practice in the field the work of agricultural research is incomplete, and that all the knowledge hitherto obtained in research laboratories will be valueless to any particular locality until it has been applied by farmers to the cultivation of their land. He asks, How is this application of scientific discoveries to the commercial questions of the ordinary farm to be accomplished? Can farmers be expected to study scientific treatises? If farmers did study and understand the publications of research stations, could they afford the time and cost involved in the adaptation of the new principles to the particular circumstances of their own farms?

He refers to the fact that the important task hitherto of the local committees charged with agricultural education has been to provide for the instruction of young persons up to the time when they leave school or college, or to supply itinerant teachers capable, as a rule, of instructing novices only. Now they will be expected to make

provision for advising experienced farmers on the means to be adopted in applying scientific discoveries to practice.

He alleges that it is a mistake to suppose that the proper way to introduce the results of scientific research to farmers is to spread information by means of lectures or leaflets; that *information* can be spread by these means, but not as a rule the results of *research as first published* by the research institutions; that few of the discoveries made by research workers are likely to be immediately applicable to the farm practice of a particular district, but must be modified before they can be utilized. When, however, on a particular farm the success of the new method has been established, neighbors will learn by imitation and the improvement may with advantage then be brought to the notice of others by lecturers and leaflets.

For the purpose, therefore, of translating the results of research into successful practice, a highly trained scientific man is required who has special knowledge of some particular branch of science and a sufficient acquaintance with agriculture to command the respect of skillful and enlightened practical farmers. He states further that for the present all that is practicable is to lay the foundation of a system having as its object the bringing into existence of a class of well-qualified specialists who shall devote themselves to the service of agriculture. The first essential is that the specialist to be employed should really be a specialist. The second essential is that the persons who are to be engaged in the work of promoting agriculture should be of the same caliber as those who have advanced arts like medicine and engineering.

Since no class of agricultural specialists corresponding to the medical specialist exists, it will be necessary to train up men for the work and, therefore, to employ at the outset young and inexperienced persons. For the first few years the work must suffer from this lack of experience, but just as well-trained young medical men quickly acquire experience so will these specialists who are being trained to help agriculturists.

To be really useful either to the large farmer or the small holder the teacher must be a specialist, and if he is a scientific man his attainments in some branch of science should be high; if a practical man he must be a more skillful practitioner than the majority of those whom he instructs.

This announcement of the purpose of the grants by the Board of Agriculture and Fisheries for the furtherance of technical instruction in agriculture and horticulture, and of the policy to be pursued in the expenditure of the funds, is of value to those who are in charge of extension work in the United States because of its careful analysis of the methods to be pursued and the qualifications of the individuals who are to disseminate the information.

The declaration that the discoveries by the experiment stations should, first of all, be placed in the hands of learned scientists who have at the same time practical acquaintance with agriculture, for testing before these truths are given over to ordinary lecturers to promulgate for general adoption is worthy of serious attention. The two classes of extension men are differentiated as to their duties in disseminating information. The observance of the distinction made will help to clear away some of the difficulties that at present embarrass institute and extension directors in this country in organizing their extension work.

ALGERIA.—Under the direction of the Algerian Commission of Technical Agricultural Instruction, Industry and Commerce, a reorganization of Algerian agriculture is taking place which includes the establishing of demonstration farms in all the agricultural regions of the colony.

This reorganization is of interest to extension workers in the United States because of its providing a method of teaching advanced agriculture by means of farms attached to the experiment stations for the purpose of exhibiting in a practical way and upon a considerable scale the results of the researches made by the stations. To these demonstration farms farmers are invited to witness what has been accomplished and to receive instruction respecting the methods employed and the cost incurred in securing the results.

The experiment stations and the demonstration farms are to serve for the instruction of the people by example and also for the propagation and dissemination by sale of the best varieties of seeds and tested plants. They are to conduct researches and experiments in plant and animal production, cultivation, fertilizers, and all farm and garden operations. These demonstration farms are by example also to teach economy and show how to check the many sources of waste and avoid unprofitable practices. They are to keep at the front in agricultural progress and set an example not in a theoretical but in a practical manner for the small as well as the large farmer by demonstrating the method of producing the largest net revenue in each case.

Each station and demonstration farm is located so as to represent the average condition of the different soils, climatic and other conditions in the several regions, and at the same time be easy of access to visitors and have at least some irrigation waters, in order to conduct the vegetable garden and nurseries. The current farm practices of each region are followed, and improvements, as a result of experiments in the experiment stations, joined to each demonstration farm, will be made gradually each year in order that no mistakes may be made and bad examples set. The land for these farms is rented for a long term of years with privilege of purchase, and each farm does not exceed 600 acres except in the dry farming region, where it may include 1,200 acres.

The purely experimental portion of the farm is conducted independently of the demonstration portion and is not expected to be self-supporting. *Each demonstration or model farm is self-supporting and all improvements are made out of its income.* The Government, however, contributes the original funds with which first to stock and equip each experiment station and demonstration farm and makes an annual grant for the experimental work which is connected with each model farm and which, of necessity, can not be expected to be self-supporting.

In order that there may be coordination, harmony, and systematic effort a director, whose salary is paid by the Government, has general charge of all the experiment stations and demonstration farms, and each station has a chief, whose salary is paid out of the annual grant to the experiment stations, while each demonstration farm likewise has a subdirector. The commission also employs scientists to conduct the expert scientific work of the stations, and expert teachers have charge of the instructional work at the demonstration farms.

The supreme object of all the experiment stations and demonstration or model farm work is the practical instruction of farmers in better and improved farm practices. The immediate practical instruction of those now *actually engaged in farming is regarded as most important* since it reflects at once and directly on the production of the country, and the demonstration by the model farm method is deemed the quickest and surest method of accomplishing this end. Accordingly, farmers' meetings are held at frequent intervals at the model farms, and practical instruction by demonstration is given to those in attendance. No theoretical instruction is attempted, and nothing not fully proven and demonstrated is given. The model farm thus becomes a permanent agricultural exposition and demonstration school where the farmers go to see the things they are to learn, and to discuss them in the fields as they are conducted about the farm. After certain improved practices have become fully and surely demonstrated at the model farm, small fields on many individual farms are used to disseminate still further the information by practical demonstration under the direction of the central farm, but the entire actual work is there done by the farmer himself.

During the lax or dormant season farmers' meetings are held throughout the country in order to interest the farmers in the demonstration farms and to sell improved seeds, plants, and animals from the model farms.

Belgium.—Meetings or conferences for the instruction along agricultural lines of adults actually engaged in agriculture have been held for a number of years in various villages in Belgium by the agricultural supervisors, agricultural engineers, professors of agriculture, and others holding diplomas permitting them to give such instruction.

The subjects discussed at these meetings include fertilizers, feeding of domestic animals, hygiene, dairying, cooperative association, rural law, the combating of the enemies of plants and animals, apiculture, poultry, and farriery.

The following lists of meetings of adult farmers with the attendance for the last three years show the progress of the work.

Meetings of adult farmers, with attendance for 3 years, 1908–1911.

Kinds of meetings.	1908–9	1909–10	1910–11
Meetings by the agricultural supervisors:			
Number of conferences	1,154	1,157	1,119
Average attendance at each conference	50	50	50
Total attendance	57,700	57,800	55,900
Meetings during the winter:			
Number of conferences	3,170	3,440	3,670
Average attendance at each conference	49	53	55
Total attendance	155,330	182,320	201,850
Agricultural meetings for the army:			
Number of conferences	550	528	572
Average attendance at each conference	27	23	26
Total attendance	14,850	12,144	14,872
Meetings on apiculture:			
Number of conferences	388	330	366
Average attendance at each conference	26	26	26
Total attendance	10,088	8,580	10,248
Meetings on poultry culture:			
Number of conferences	355	336	437
Average attendance at each conference	46	44	53
Total attendance	16,330	14,784	23,161
Meetings on farriery:			
Number of conferences	252	240	252
Average attendance at each conference	31	29	28
Total attendance	7,812	6,960	7,056
Special meetings:			
Number of conferences	655	752	614
Average attendance at each conference	50	50	60
Total attendance	32,750	37,600	36,840

SWEDEN.—There is probably no country in the world where agricultural education is better organized and more appreciated than in Sweden. The farmers' schools in that country make provision for those actually engaged in agricultural work who can spare only part of the year for improving their education. There are 30 of these farmers' schools in Sweden, and they usually form a special part of the work of the people's high schools which provide for the general education of adults. The work of the farmers' schools is based on and is an extension of the general training given in the people's high schools.

During the year 1909-10 the 30 schools were attended by 476 pupils, of whom 266 paid their own fees. The number of students per school ranged from 4 to 40. The ages of the pupils varied from 16 to 33 years, the average being a little over 20½. The Government grant is from $825 to $1,100 per annum for each school, and at least an equal sum must be raised locally.

A summer course in household economy for women was held from May 1 to October 3, 1912. There were 6 special students of the average age of 20½ years working together with a number of ordinary high-school pupils. The practical instruction includes cooking, related business transactions, and baking of various kinds. Each pupil in

turn was responsible for the preparation and serving of a dinner. The theoretical instruction included the nutritive value of different foods, dietetics, food preservation, tests of fitness or unfitness of food for home consumption, domestic economy, cost of meals per head, care of the home, and rules of health. The pupils also received instruction in hygiene, chemistry, physics, bookkeeping, care of farm stock, dairying, sociology, singing, and gymnastics. The tuition fee for the summer course is $8.75.

The Swedish system of education also provides for instruction in veterinary science, farriery, horticulture, forestry, the peat industry, fisheries, and economics; besides which there are itinerant agricultural schools and specially arranged schools for small holders. Another very interesting kind of educational work is now being developed, namely, instruction in the methods of canning fruits, preparation of dried fruits, jam making, preparation of preserves, etc., by means of traveling vans fitted up with the necessary apparatus.

ITALY.—The expenses of the itinerant chairs of agriculture have been classed heretofore as "optional expenses," and therefore subject to cancellation by the provincial administrative assemblies for the communities when exceeding the limits of overtaxation. The statute of June 12, 1912, modifies this requirement as follows: "The Province and its communities which exceed the limit of overtaxation possess the authority to approve or register the optional expense balances with the same provisions by which excesses are authorized, always when such expenses are evidently necessary for health, instruction, beneficence, agriculture, and the conservation of itinerant chairs of agriculture."

FRANCE.—The law of August 21, 1912, relating to departmental and communal agricultural instruction provides a director of agricultural services in each Department in place of the departmental chairs of agriculture established by the law of June, 1879. The work of this director includes: The popularization of agricultural knowledge; the teaching of agriculture; in the establishment of public instruction selected by ministerial decree; the service of the economic and social interests of agriculture and of agricultural insurance and rural hygiene; agricultural information, statistics, and food supply; the direction of experimental fields; researches or technical missions, and in general, all the services to do with agriculture. The veterinary and forestry services and the direction of agricultural stations are not included in these duties.

The departmental professor of agriculture shall hereafter be entitled "director of the agricultural services." He is assisted by one or several agricultural lecturers, who hold special positions, whose sphere of work is variable and comprehends all or part of one or several "arrondissements." These spheres may be extended still further in the case of specialists. By resolution of the chamber, a credit of $182,000 was incorporated in the budget for 1912, and of this $160,000 is to provide salaries for these State functionaries and $22,000 is for other expenses which the Department or communes have to meet.

The range of duties of the Department professors has remarkably increased. At present their duties may be divided into two groups: They are on one hand a kind of information bureau where farmers may seek advice in all matters, and on the other they serve as agents of the central administration for conducting investigations of the most varied nature. Under this latter head they must make a monthly report upon the general condition of agriculture in their special territory, and further upon tillage areas and growing and ripened crops, and finally conduct special investigations.

The appointment of professors of agriculture has as a prerequisite the passing of a competitive examination under the Ministry of Agriculture, upon which the bill contains some provisions. The candidate must be 25 years of age, be a graduate of the agricultural college (Institute National Agronomique) or of one of the agricultural national schools with two and one-half years' curriculum and an uninterrupted two years' experience in agricultural administration after graduation. The appointment

and adaptation for the position of a professor of agriculture is determined by a jury, of whom three are practical farmers. In case of a vacancy in an agricultural directorship a competitive examination is announced, but the post is filled by a professor of agriculture who has already filled this office at least five years. These provisions do not, of course, apply to functionaries already in office.

The State is responsible for the salaries of both classes. The salary of director of agriculture ranges in four grades, from $900 to $1,200. That of professor of agriculture from $560 to $800. Advancement to the next higher grade occurs after at least three, at most five, years. Both classes are subordinate to the Minister of Agriculture, who exercises supervision through general inspectors and inspectors in administrative matters through the governors of Departments.

The Department must assume the office and traveling expenses of the director of agriculture and the professor of agriculture assigned to him. The Department or commune must defray the expenses of the other professors of agriculture. At least $240 annually for the traveling expenses must be included in the Department's budget.

It is hoped by taking this course with regard to the position and salary of directors and professors of agriculture to exert a still more beneficial influence for the advancement of agriculture. As a matter of fact, the union of itinerant instruction with certain public functions and with the instructorship in elementary schools and normal institutions seems to be a measure worthy of imitation.

Prussia.—An editorial in the Journal of the Board of Agriculture (England), April, 1913, number, discusses quite fully the system of agricultural education in Prussia. Attention is called by the writer to the fact that more and more theoretical instruction in agriculture is given in the schools and less of the practical. This is attributed to the tendency of the practical man who becomes a teacher to stereotype his subjects and gradually lose sight of the practical features of the work.

This tendency is to some extent overcome by the practice of withdrawing these teachers from their schools during the summer and starting them out on itinerant work, thus bringing them for a considerable portion of each year in contact with the actual operations of agriculture. It is claimed that this contact with the farmer is not only of great advantage to the teacher and the farmer, but to the scholars in the schools to which the teacher returns in winter. There seems to be no doubt in the mind of the writer that much of the efficiency and popularity of the winter schools are due to the freshening influence and practical experience that the instructor has gained through contact during the itinerant period with farming people.

Peripatetic work in Prussia is carried on by two distinct classes of persons: First, the teaching staffs of the winter schools, who devote only part of their time to peripatetic service, and, second, a class who devote their entire time to this kind of work. The last class is employed for the most part by the Chamber of Agriculture while the necessary funds are supplied by the State. Their activities are not limited to the delivery of lectures, but they are required also to see that new ideas and inventions are brought to the attention of agricultural people in their respective districts. The effort on the part of the chambers of agriculture is to employ for this continuous service men who, in addition to possessing all-round knowledge of agriculture, have also special knowledge of some particular branch of the subject.

In addition to the more informal methods practiced in giving instruction a large number of special courses on various subjects are conducted for the benefit of agriculturists in all parts of Prussia. The majority of these are short, practical series of lectures on subjects such as bookkeeping, manures, pig breeding, etc. There are also courses of instruction for country women and girls in domestic economy and similar subjects. There is also a large amount of continuation school work carried on, also a system of colleges for training agricultural teachers to supply the necessary pedagogic skill to peripatetic teachers who possess theoretical and practical knowledge but have no teaching experience.

A very important fact is noted by the writer to the effect that there is a tendency on the part of the winter schools to increase in number and of the lower agricultural schools to decrease. This is attributed to the fact that the agricultural population, from whom the students are mainly drawn, appreciate the theoretical education given in winter, but do not appreciate the practical instruction given during the rest of the year, when equally good and at the same time paid practical experience can be obtained on farms.

STATE REPORTS.

Detailed information respecting institute work in the several States is given in the statistical tables accompanying this report. Numerous items of interest, showing the progress of the work, but which are incapable of tabulation, appear in the reports of the directors. In order that these features may be known by the body of workers, the principal points presented are referred to in the following accounts under the names of the respective States:

ALABAMA.—A round-up meeting and summer school for institute workers was held at the Alabama Polytechnic Institute, continuing through 84 sessions, with a registered attendance of 900.

ALASKA.—The farmers in Alaska are so widely scattered and travel so costly that it is impracticable to organize or maintain farmers' institutes. There are, however, approximately 2,000 people in the Territory who have small gardens. In the towns and in some camps are market gardeners who make a success of the business. There are vast areas of wilderness that could be made into farms, but the director reports that settlement can not and will not be made until railways are built. The principal need at present is money to pay the salaries and expenses of traveling instructors.

ARIZONA.—The special topics assigned to be discussed in every institute during the season were dairying, dry farming, good roads, and insect pests. The new features introduced into the institute work were the demonstration train, the farmers' fortnightly course at the university, and the farmers' institute at county fairs. The great need for the development of the work is more money to increase the number of institute workers.

ARKANSAS.—A school for boys and girls was held at the State fair and on May 31 there was held what was called "Silo Day" at the agricultural college. Changes in the faculty of the college and the staff of the experiment station, together with meager appropriation for institute purposes, has seriously interfered with the development of the work.

CALIFORNIA.—The new features introduced into the institute work during the year were the formation of women's agricultural clubs, and the appointment of itinerant and county advisors. Owing to differences in local climates and leisure seasons in various parts of the State, institutes are held every month. The State legislature has increased the farmers' institute appropriation per annum from $15,000 to $25,000.

COLORADO.—Many counties in Colorado have no agricultural interest, consequently institutes are held in a limited number only. The work is so closely combined with that of college extension that no well-defined line of separation exists, making it difficult to report separately upon these two features of extension. The failure of the State to pay the appropriation this year has prevented much that had been planned.

CONNECTICUT.—The farmers' institute work formerly carried on by the State board of agriculture, the Connecticut Dairymen's Association, and the Connecticut Pomological Society has been combined under a single directive head. An effort is being made to bring the institutes into closer relations with the agricultural fairs. Several

meetings at these exhibits have been held and arrangements are being made for the formation of a State association.

DELAWARE.—The special topics assigned to be discussed in every institute during the past season in Delaware were poultry and home economics. An educational train was run during the first week of December over the Chesapeake and Delaware Peninsula, making 15 stops in Delaware and 15 in Maryland. The total attendance was 2,684. The topics discussed by the lecturers accompanying the train were tomato culture, fruit culture, live stock, corn growing, poultry, and alfalfa.

FLORIDA.—The new features introduced into the institute work in Florida during the year were county institutes and produce contests. There was a live-stock convention and a citrus seminar was held. Lectures were also given at agricultural fairs. The director, in answer to inquiry as to the particular assistance needed in his work, replied "more publications."

GEORGIA.—In Georgia the principal new feature introduced into the institute work during the year was the development of the county institute by organizing them with a full set of officers and the adoption of a constitution and by-laws. During the year a live-stock conference and breeders' meeting, and several horticultural meetings were held and a number of agricultural excursions made to the college and experiment station.

IDAHO.—The State has increased the appropriation for institute work from $4,000 a year to $12,500. The number of movable schools has been increased, county agents have been appointed, and summer picnic institutes held in regions not easily accessible in winter. It is proposed to lessen the number of old-time farmers' institutes as the movable schools and county agents increase in number. There has been added to the staff in the field a home economics extension worker and horticultural expert. The subject of live stock was assigned to be discussed at every institute held in the State. A new feature was introduced into the work in the form of a round table exercise. The first session at each institute included this round table discussion.

ILLINOIS.—In Illinois the county institutes are independent organizations established by law and are assisted by the State with funds and speakers when these are applied for. The agricultural college and experiment station workers serve only when called upon. An annual convention of the farmers' institute workers is held each year, continuing for a week, at which the election of district directors is held. Provision is also made for women's auxiliaries and special features are provided by the institute for the instruction of young people along agricultural lines.

INDIANA.—An annual conference was held in October consisting of six sessions; the average attendance of the active workers was 31, and the average attendance of workers and visitors together was 55. Greater emphasis is being placed upon the organization of boys' and girls' school clubs.

IOWA.—In Iowa the county institute is an independent organization. The money is appropriated to the amount of $75 directly to each county holding an institute of not less than two days during the year. An annual convention is provided for, at which each institute organization is entitled to representation provided it has been organized at least one year and has reported to the State secretary of agriculture through its president and secretary or executive committee that an institute was held according to law. In connection with the annual convention, either preceding or following the date on which officers are elected, the State board may hold a State farmers' institute for the discussion of practical and scientific problems relating to various branches of agriculture.

KANSAS.—The new features introduced into the institute work in Kansas during the past year were boys' institutes and demonstration work by county and district agents. The subjects taught on the railroad instruction trains were diversified farming and home management. Institutes, also were held in connection with orchard demonstrations. There were also dairy institutes and other meetings for special purposes not on the regular institute schedule.

KENTUCKY.—Corn clubs, corn judging shows, home coming rallies, and orchard demonstration meetings were held under the auspices of the farmers' institute. Among the new features was the organization of women's home economic clubs as auxiliaries to the farmers' institutes.

LOUISIANA.—The farmers' institute work in Louisiana is by law placed under the direction of the commissioner of agriculture and immigration. Owing to the meager appropriation no institutes have been held by this department, but meetings of similar character have been conducted by the director of the State experiment station at Baton Rouge.

MAINE.—The law in Maine requires that two institutes shall be held in each county each year. Considerable attention has been given during the past year to assisting at meetings held in the interest of cooperation among farmers and in assisting in organizing associations of this character. In addition to the regular institutes lecturers have been sent to 37 meetings of granges.

MARYLAND.—A new feature introduced into the farmers' institutes during the year was the illustrated lecture. This has been found to be a very effective method of impressing agricultural truth. The illustrations are taken from Maryland farms and from work done at the agricultural experiment station and the college.

MASSACHUSETTS.—This year the Massachusetts Board of Agriculture voted to amend the rule relating to institutes so as to require societies to hold at least one institute each year instead of three as in the past. The plan is to spend more money on the one meeting, have more and better speakers, and to advertise each meeting more thoroughly. The secretary of the board is to assume immediate control and give greater assistance without taking the actual arrangements out of the hands of local committees. A summer field meeting of the board was held continuing through one day, and also a public winter meeting continuing for three days.

MICHIGAN.—The new feature introduced into the institute work during the year was cooperation with county agricultural advisors. Calls for new work also came in the form of more meetings of the women's congresses. This was insistent and the institutes are beginning work in this direction by holding from two to six meetings a year, the latter number where the organization is firmly established. The plan is to place in the hands of each of the congresses an outline to be followed much as study clubs are carried on, these to be supplemented by suggestions, questions, and helps from the department, and with the traveling libraries and loan collections of pictures from the State libraries, which are furnished without charge to such organizations. The topics considered at these meetings will be practical ones which affect the home and household, such as sanitation, cookery, scientific cleaning, canning fruits and vegetables, home nursing, home gardens, and such topics as the schools, preservation of trees, birds, public buildings, and grounds, and good roads. The department sends also an outside lecturer or demonstrator to at least two of these meetings during the year. It is planned to exchange speakers by sending members of the local congresses from one county to the next, thus working cooperatively. The topics treated by lecturers accompanying the institute trains were alfalfa, dairying, beekeeping, and agronomy.

MINNESOTA.—In Minnesota the new feature was that of granting assistance to county agent work. The institute board aided nine counties in this direction, using in all $1,675 for this work.

MISSISSIPPI.—The new feature introduced into institutes in Mississippi was the organization of farm clubs for production and market demonstration. The clubs are organized for growing sweet and Irish potatoes, corn, cane, and hogs, and for the cooperative and systematic marketing of these products. This work is being done chiefly in the section devastated by the Mexican boll weevil. It is the purpose to establish county organizations and extend the work to every district in the State. The institute work in the summer begins July 1, running three months. The winter period begins December 1, continuing for a like period. The interim between each active season

is spent by the department officers in correspondence, organization, planning of work, lecturing before schools, institutes, and normals. The topics discussed from institute trains were live stock, soils, and general crops.

MONTANA.—The new feature introduced during the year was the inauguration of a farmers' week and calling a country life convention at the agricultural college. There were also demonstrations held at the experiment station farms under the auspices of the institute division.

NEBRASKA.—The new feature introduced by the Nebraska institutes was fruit-tree pruning demonstrations. The institute authorities are also urging the one-week short course and expect to hold a considerable number of these next year. Special fruit institutes were held, and assistants was also given at farmers' club meetings.

NEW HAMPSHIRE.—A summer field meeting was held continuing through two sessions with an attendance estimated at 2,000. A new feature introduced was demonstrations at the institutes by the use of live stock on the platform. A new law was enacted by the legislature in 1913 by which a department of agriculture was created and the State divided into three agricultural districts. In addition to the commissioner of agriculture, the governor was authorized to appoint six practical agriculturists, two of whom shall reside in each of the districts, constituting an advisory board of the department of agriculture. They are allowed their actual and necessary expenses while performing official duty and the additional sum of $4 per day. They are required to meet at the office of the commissioner of agriculture as often as once in two months to advise with him as to the work of the department. The commissioner is required to hold one or more farmers' institute meetings in each county annually and at least one State meeting. He is required to cooperate so far as may be practicable with the extension work of the college of agriculture and mechanic arts, and is required to provide courses of study of one week or more to be pursued in connection with the county demonstration meetings in counties offering satisfactory agricultural cooperation. He is also required to cooperate with the State superintendent of public instruction in the preparation of elementary courses in agriculture for secondary schools, as well as courses for elementary work in the lower grades of the common schools.

NEW JERSEY.—In addition to the regular institutes held throughout the State, lecturers were provided for meetings for Jewish people, for Y. M. C. A. conventions, corn growing associations, country church clubs, county schools of agriculture, and agricultural clubs.

NEW MEXICO.—The work in New Mexico consisted almost entirely of running agricultural trains. During June, July, and August 17 of the county teachers' institutes were attended by the superintendent of agricultural extension and his assistant. Boys' and agricultural industrial club work was conducted, but chiefly through correspondence. The lack of an appropriation for institute work has limited the efforts of the director to the work designated.

NEW YORK.—In one county in New York a series of lectures was given in lieu of the institutes. The farmers' institute bureau is cooperating with the county bureaus now organized in 17 counties of the State. The work of forming and supervising cow testing associations has been added to the duties of the farmers' institute. Twenty-five such associations are now in operation. Summaries of the addresses of institute lecturers were printed and distributed, thus permitting persons present at their delivery to take home for future reference the facts presented. The director of farmers' institutes holds conferences annually in all of the counties. At these conferences he meets representative farmers, at which time the institutes and other agricultural work for the year are arranged for. A local correspondent is selected for each institute, his duties being to arrange for securing a suitable hall and to assist in advertising the meeting. Special topics, lime and humus, were assigned to be discussed at all institutes, and in the dairy section the organization of cow testing associations. Approximately 450 farms were visited and spraying and other demonstrations given.

North Carolina.—A new feature of the work in North Carolina was the holding of a three-day normal or training institute for the benefit of lecturers prior to their starting out on institute work. This year before making up the programs or selecting the speakers the director wrote to members of the committees in the several communities asking them to suggest topics that would in their opinion be likely to be most helpful to their different localities. Two hundred and thirty-two days of women's institutes were held, consisting of 460 sessions and attended by 20,268 women. The dates, places, and programs of the institutes are arranged by the State director in consultation with the local committees. Thirty-five thousand reports of the proceedings of the institutes were printed and distributed.

Ohio.—Under the new law the number of institutes required to be held in each county has been increased from four to five. The funds are distributed on the basis of $300 for each of the 88 counties. The dates, places, and programs of the institutes are arranged by the institute committee of the State board of agriculture.

Oklahoma.—Owing to radical changes in the law, institutes have been without organization since January, 1913. This was brought about through a bill which recalled the board of agriculture and practically destroyed the institute organization. Institutes for women, however, were held as usual, to the number of 497, attended by 30,922 women. The entire appropriation for women's work was $5,000. The special feature introduced during the year was that of home nursing and rural hygiene.

Oregon.—In Oregon an act was passed appropriating $25,000 per annum to conduct and encourage educational extension demonstrations and field work in the several counties of the State to include agriculture, horticulture, dairying, domestic science, and other industries. The several counties were also authorized to provide and appropriate funds for use in agricultural or farm demonstrations and field work, and for each dollar so provided by the county there should be the sum of $1 in addition to the appropriation of $25,000 to be paid out of any moneys in the State treasury not otherwise appropriated. The total amount so appropriated to any county having an area of 5,000 square miles or less, not to exceed $2,000 in any one year; and to any large county not to exceed $4,000 in any one year. A woman has been employed for the domestic science and art work, one man has been employed for extension work in horticulture, and another is to be added for the work in animal husbandry and dairy production.

Pennsylvania.—The last Legislature of Pennsylvania enacted a law providing for the employment by the institute director of 10 farm advisors whose duties shall be to visit the farmers of the State and aid them in all questions relating to farm operations, embracing crop rotation, drainage and water supply, small fruits, market gardening, horticulture, animal husbandry, dairying, and poultry. An appropriation of $40,000 for the season was made for carrying this act into effect. The legislature also increased the regular appropriation for farmers' institute work from $22,500 to $27,500. The following special topics were assigned to be discussed in every institute during the year: Poultry, dairying, horticulture, soils, and market gardening. An appropriation of $12.50 per day is allowed to each county chairman for hall rent, printing, and hotel and traveling expenses. The balance of the appropriation by the State is used by the State director in paying for the services, hotel and traveling expenses of lecturers.

Rhode Island.—No special appropriation was made for farmers' institute work, but the sum of $700 was set aside for this purpose from the fund appropriated for the general work of the board of agriculture. Demonstrations for controlling tree pests, also in pruning and spraying were held under institute auspices. The institute lecturers also devoted a considerable amount of time to the development of school garden work and in conducting industrial contests.

South Carolina.—A new feature of the institute work in South Carolina has been the holding of institutes on the farms, using the stock and field crops for illustrative

material. All of the work of instruction is by members of the faculty of the agricultural college and by demonstration agents in the various counties.

South Dakota.—The Legislature of South Dakota increased the appropriation for farmers' institute purposes from $16,000 to $20,000 per annum. A ladies' auxiliary of the farmers' institutes has been organized and a lady has been placed in charge of this department. Meetings for women were held at 128 points, with a total attendance of 11,826. The special topics discussed during the year in the men's institutes were alfalfa and corn growing.

Tennessee.—Institute work during the last year was confined almost wholly to agricultural trains. Owing to legislative entanglements no appropriation for farmers' institutes was made. Notwithstanding the lack of funds, however, three round-up or divisional institutes were held by the commissioner of agriculture, who is in charge of the institute work in this State.

Texas.—In cooperation with the State entomologist the farmers' institute director has appointed in each district a local entomological observer to report on insect pests. He has also organized a large number of baby beef and boys' and girls' hog clubs. Special meetings were held by the pathologist and entomologist for demonstrations in spraying against codling moth and other insect and fungus diseases. Five institute trains were run. The topics presented were soil mulching, seed selection, stock and poultry rearing, silo construction, and control of insect and fungus diseases.

Utah.—The special topics discussed at the institutes in Utah during the past season were conservation of irrigation water; economy in time, energy, and labor of men and women. Among the new features introduced were the appointment of county chairmen, and the publication of synopses of addresses to be distributed among the audiences. An institute train was run, the subjects taught being animal husbandry, dry farming, and irrigation.

West Virginia.—At the last session of the legislature a law was enacted transferring the farmers' institute work from the board of agriculture to the control of the college of agriculture at Morgantown. Under the direction of the university, four institute trains were run, with a total attendance of 16,490. The subjects taught were soil improvement, poultry, and market gardening. Lecturers from the institute force were present at teachers' institutes, high schools, and normal schools. Six itinerant experts were employed in field demonstration work and as agricultural advisors to individual farmers. These each devoted 11 months to this service.

Wisconsin.—In Wisconsin the special topics discussed at the institutes were soil conservation, crop rotation, silos, cooperation, dairying, and the growing of alfalfa. A number of new institute lecturers were employed during the year, among whom was a representative of the Wisconsin Live Stock Breeders' Association. In addition to the instruction given by lectures at the institutes, an edition of 10,000 copies of a cookbook was published and distributed.

STATE OFFICIALS IN CHARGE OF FARMERS' INSTITUTES.

Alabama.—C. A. Cary, Alabama Polytechnic Institute, Auburn; Reuben F. Kolb, commissioner of agriculture, Montgomery.

Alaska.—C. C. Georgeson, Agricultural Experiment Station, Sitka.

Arizona.—A. M. McOmie, superintendent of farmers' institutes, Tucson.

Arkansas.—Martin Nelson, director of farmers' institutes, Fayetteville.

California.—W. T. Clarke, superintendent of university extension in agriculture, Berkeley.

Colorado.—C. H. Hinman, director of farmers' institutes and extension, Fort Collins.

Connecticut.—L. H. Healey, secretary State board of agriculture and director of advisory board of farmers' institutes, Hartford.

Delaware.—Wesley Webb, corresponding secretary, State board of agriculture, Dover.

Florida.—P. H. Rolfs, director Agricultural Experiment Station, Gainesville.

GEORGIA.—A. M. Soule, president State college of agriculture, Athens.
HAWAII.—Wm. Weinrich, jr., secretary and treasurer farmers' institutes, Box 583, Honolulu.
IDAHO.—W. H. Olin, superintendent of extension, 439 Yates Building, Boise.
ILLINOIS.—H. A. McKeene, secretary Illinois farmers' institutes, Springfield.
INDIANA.—W. C. Latta, farmers' institute specialist, Lafayette.
IOWA.—A. R. Corey, secretary State board of agriculture, Des Moines.
KANSAS.—Edward C. Johnson, superintendent of farmers' institutes and demonstrations, Manhattan.
KENTUCKY.—J. W. Newman, commissioner of agriculture, labor, and statistics, Frankfort.
LOUISIANA.—E. O. Bruner, commissioner of agriculture, Baton Rouge; W. R. Dodson, director Agricultural Experiment Station, Baton Rouge.
MAINE.—J. A. Roberts, commissioner of agriculture, Augusta.
MARYLAND.—R. S. Hill, director of farmers' institutes, Upper Marlboro.
MASSACHUSETTS.—Wilfred Wheeler, secretary State board of agriculture, Boston.
MICHIGAN.—L. R. Taft, superintendent of farmers' institutes, East Lansing.
MINNESOTA.—A. D. Wilson, superintendent of farmers' institutes, University Farm, St. Paul.
MISSISSIPPI.—R. H. Pate, director of farmers' institutes and extension, Agricultural College.
MISSOURI.—T. C. Wilson, secretary State board of agriculture, Columbia.
MONTANA.—F. S. Cooley, superintendent of farmers' institutes, Bozeman.
NEBRASKA.—C. W. Pugsley, superintendent agricultural extension, Lincoln.
NEVADA.—J. E. Stubbs, president Nevada State University, Reno.
NEW HAMPSHIRE.—N. J. Bachelder, secretary State board of agriculture, Concord.
NEW JERSEY.—Alva Agee, director of farmers' institutes and agricultural extension, New Brunswick.
NEW MEXICO.—W. T. Conway, superintendent agricultural extension, State College.
NEW YORK.—Edward Van Alstyne, director of bureau of farmers' institutes, Albany.
NORTH CAROLINA.—T. B. Parker, director of farmers' institutes, Raleigh.
NORTH DAKOTA.—G. W. Randlett, superintendent of farmers' institutes and extension, Agricultural College.
OHIO.—A. P. Sandles, president agricultural commission, Columbus.
OKLAHOMA.—Miss Irma Mathews, superintendent women's institutes, Oklahoma City.
OREGON.—R. D. Hetzel, director extension department, Corvallis.
PENNSYLVANIA.—A. L. Martin, deputy secretary of agriculture, Harrisburg.
PORTO RICO.—F. L. Stevens, in charge farmers' institute work, Mayaguez.
RHODE ISLAND.—John J. Dunn, secretary State board of agriculture, Providence.
SOUTH CAROLINA.—W. W. Long, State agent and superintendent of farmers' institutes and extension, Clemson College.
SOUTH DAKOTA.—H. H. Stoner, superintendent of farmers' institutes, Highmore.
TENNESSEE.—T. F. Peck, commissioner of agriculture, Nashville.
TEXAS.—J. W. Neill, director of farmers' institutes, care State board of agriculture, Austin.
UTAH.—E. G. Peterson, director of agricultural extension, Logan.
VERMONT.—Elbert S. Brigham, commissioner of agriculture, St. Albans.
VIRGINIA.—J. J. Owen, director of farmers' institutes, department of agriculture, Richmond.
WASHINGTON.—J. A. Tormey, head extension department, Pullman.
WEST VIRGINIA.—C. R. Titlow, director of farmers' institutes and extension, Morgantown.
WISCONSIN.—George McKerrow, director of farmers' institutes, Madison.
WYOMING.—H. G. Knight, director Agricultural Experiment Station, Laramie.

STATISTICS OF FARMERS' INSTITUTES, 1913.

Number of institutes held and the approximate attendance during the year ended June 30, 1913.

State or Territory.	Number of one-day meetings.			Number of two-day meetings.			Number of three or more day meetings.			Total number of institutes.			Total number of days of institutes held during the year.			Total number of sessions.			Total attendance at all sessions.			Average per session.
	General institutes.	Women's institutes.	Young people's institutes.	General institutes.	Women's institutes.	Young people's institutes.	General institutes.	Women's institutes.	Young people's institutes.	General institutes.	Women's institutes.	Young people's institutes.	General institutes.	Women's institutes.	Young people's institutes.	General institutes.	Women's institutes.	Young people's institutes.	General institutes.	Women's institutes.	Young people's institutes.	
Alabama	25									25			25			44			5,049			115
Alaska [1]																						
Arizona	8	1								8	1		8	1		16	2		21,831	300		1,230
Arkansas	24									24			24			48			3,830			80
California	121	7		30			2			153	7		187	7		367	8		38,850	868		106
Colorado	49			15			9			73			106			115			15,729			137
Connecticut	37									37			37			64			5,910			93
Delaware	17			4						21			25			64			9,366			147
Florida	78	5		4						82	5		86	5		174	12		16,943	1,200		98
Georgia	120									120			120			200			23,350			117
Hawaii [2]																						
Idaho	46	5		6						52	5		58	5		168	5		11,772	320		70
Illinois				25			92			117			326			960			197,787			207
Indiana	207			210			1			418			630			1,389			225,496			163
Iowa				29			84			113			310			1,064			209,460			197
Kansas	316	73	13	95			1			412	73	13	509	73	13	925	73	13	82,822	3,688	780	87
Kentucky				78			1			79			159			320			17,200			54
Louisiana [1]																						
Maine	41			1						42			43			52			3,582			69
Maryland	49			9						58			67			153			21,492			141
Massachusetts	138									138			138			154			18,172			118
Michigan	340	54	1	76			3			419	54	1	501	54	1	1,179	54	1	138,964			113
Minnesota	79			77			2			158			239			477			77,306			163
Mississippi	349			7			6			362			381			610			121,026			199
Missouri	185	15		61			3	4		249	19		316	27		512			92,167			181
Montana	158			4						162			166			272			18,067			67
Nebraska	91		3	100		8	3			194		11	300		19	591		22	113,057		10,000	201
Nevada [1]																						
New Hampshire	16									16			16			30			2,500			84
New Jersey	42			5						47			52			142			10,937			78
New Mexico																						

New York	367			39			5			411			460			1,392			115,084			83
North Carolina	234	229					1	1		235	230		237	232		470	460		39,268	20,268		65
North Dakota	19			14			1			34			50			107			8,683			82
Ohio				346						346			692			1,830			398,215			218
Oklahoma	60	348		2	138		5	11		67	497		79	657		85	1,125		8,000	30,922		33
Oregon	96			1						97			98			113			13,229			118
Pennsylvania	20			184			6			210			406			1,012			128,008			127
Porto Rico [2]																						
Rhode Island	28			1						29			30			36			2,800			78
South Carolina	105									105			105			210			35,000			167
South Dakota	120	128		143			6			269	128		424	128		671	128		74,131	11,826		108
Tennessee																						
Texas	925		56	112			15			1,052		56	1,194		56	1,179		56	315,688		11,320	265
Utah	56	25		11	11					67	36		78	47		115	72		6,358	3,165		51
Vermont [2]																						
Virginia [2]																						
Washington [2]																						
West Virginia	5			97			2			104			205			520			43,052			83
Wisconsin				135	42		1	1		136	43		273	87		681	87		100,525	11,482		146
Wyoming	6									6			6			11			546			50
Total	4,577	890	73	1,921	191	8	249	17		6,747	1,098	81	9,166	1,323	89	18,522	2,026	92	2,791,252	84,039	22,100	141

[1] No institutes held.

[2] No report.

Financial statistics of the farmers' institutes for the year ended June 30, 1913.

State or Territory.	Funds appropriated.		Cost of institutes.		Appropriation for the season 1914.
	By the State.	By the college and received from other sources.	Total cost.	Cost per session.	
Alabama	$600.00	$1,000.00	$1,600.00	$36.36	$1,600.00
Alaska [1]					
Arizona	2,500.00	398.88	2,898.88	161.05	4,400.00
Arkansas	4,000.00	200.00	4,200.00	87.50	3,750.00
California	15,000.00		15,000.00	40.00	25,000.00
Colorado	2,500.00	2,500.00	5,000.00	43.48	
Connecticut	900.00	200.00	1,050.00	16.40	
Delaware	1,000.00	1,000.00	1,150.00	17.96	600.00
Florida	7,500.00		7,500.00	40.32	10,000.00
Georgia	25,000.00		25,000.00	125.00	
Hawaii [2]					
Idaho	4,000.00	1,000.00	5,000.00	28.90	12,500.00
Illinois	27,650.00		27,650.00	28.80	24,550.00
Indiana	10,000.00	13,300.00	21,000.00	15.12	10,000.00
Iowa	7,559.21	39,818.63	39,987.80	37.58	
Kansas	16,650.00	7,435.00	24,085.00	23.82	22,400.00
Kentucky	20,000.00	1,500.00	10,866.13	33.95	20,000.00
Louisiana [1]					
Maine	2,300.00		1,050.00	20.19	2,300.00
Maryland	6,000.00		5,437.86	35.54	6,000.00
Massachusetts	6,000.00		2,411.51	15.65	6,000.00
Michigan	8,500.00	400.00	8,900.00	7.21	
Minnesota	23,000.00	3,625.00	26,557.09	55.67	23,000.00
Mississippi	7,500.00	1,200.00	8,700.00	14.26	
Missouri	8,750.00		8,750.00	17.09	
Montana	10,000.00		10,000.00	36.76	10,000.00
Nebraska	17,500.00		17,500.00	28.55	25,000.00
Nevada [1]					
New Hampshire	1,200.00		995.00	33.16	2,000.00
New Jersey	4,679.12		4,679.12	32.95	
New Mexico		500.00			
New York	38,000.00		31,641.56	22.74	20,000.00
North Carolina	10,000.00		10,000.00	10.75	12,500.00
North Dakota	6,000.00	1,185.00	5,769.00	53.91	6,000.00
Ohio	28,716.76		28,716.76	15.70	26,400.00
Oklahoma	10,500.00		10,500.00	8.67	5,000.00
Oregon	2,500.00		2,500.00	22.12	2,500.00
Pennsylvania	22,500.00		22,500.00	22.23	27,500.00
Porto Rico [2]					
Rhode Island		700.00	546.12	15.17	
South Carolina	2,500.00		2,200.00	10.47	
South Dakota	16,000.00		16,000.00	20.02	20,000.00
Tennessee					
Texas	17,500.00	3,010.17	20,510.17	16.60	
Utah	10,000.00	775.00	10,000.00	53.48	10,000.00
Vermont [2]					
Virginia [2]					
Washington [2]					
West Virginia	6,332.02		6,332.02	12.17	
Wisconsin	20,000.00		20,000.00	26.04	20,000.00
Wyoming		200.00	200.00	18.19	1,500.00
Total	430,837.11	79,947.68	474,384.02	22.99	360,500.00

[1] No institutes held.

[2] No report.

Number of lecturers employed by the State directors of farmers' institutes and reports of proceedings published for the year ended June 30, 1913.

State or Territory.	Total number of lecturers on the State force.	Number of members of agricultural-college and experiment-station staffs engaged in institute work.	Number of days contributed to institute work by agricultural-college and experiment-station lecturers.	Number of State lecturers giving agricultural instruction at—				Reports of proceedings.	
				Teachers' institutes.	High schools.	Normal schools.	Common schools.	Published.	Number of copies.
Alabama								No.	
Alaska [1]									
Arizona	15	15	72					No.	
Arkansas	10	10						No.	
California	25	10	153	6	5	1	4	Yes.	15,000
Colorado	34	34		14	5		5	No.	
Connecticut	42	20	30					Yes.	5,000
Delaware	15	4	41					Yes.	3,000
Florida	16	11	29				3	Yes.	1,500
Georgia	23	23	361	5				Yes.	500
Hawaii [2]									
Idaho	15	7	210	1	10	1		No.	
Illinois	65							Yes.	50,000
Indiana	55	14	76					Yes.	2,500
Iowa								Yes.	3,000
Kansas	19	18	108	6	10	1	2	No.	
Kentucky	8	1		1	20			Yes.	
Louisiana [1]									
Maine	23	5	10					Yes.	4,500
Maryland	15	7	44					No.	
Massachusetts	62	18	29					No.	
Michigan	42	8	60					Yes.	12,500
Minnesota	15				6			Yes.	50,000
Mississippi	20	14	132	3	3	4	1	No.	
Missouri	17	8	15					No.	
Montana	17	11	250	3	5			No.	
Nebraska	52	18	101					Yes.	
Nevada [1]									
New Hampshire	13	6	30					Yes.	1,500
New Jersey	8	7						No.	
New Mexico	8	8	150					No.	
New York	75	20	80			12		Yes.	10,000
North Carolina	37	4	79					Yes.	35,000
North Dakota	12	8	39					Yes.	25,000
Ohio	44							Yes.	
Oklahoma	17	13		8	20	5		Yes.	5,000
Oregon		56	612	8	7	1	14	No.	
Pennsylvania	54	8	50					Yes.	7,500
Porto Rico [2]									
Rhode Island	29	9	17				1	No.	
South Carolina	12							No.	
South Dakota	12							No.	
Tennessee								Yes.	3,000
Texas	17				5		5	Yes.	20,000
Utah	35	15	109	2	11		5	No.	
Vermont [2]									
Virginia [2]									
Washington [2]									
West Virginia	18							No.	
Wisconsin	38	3	9					Yes.	50,000
Wyoming	2	2	54					No.	
Total	1,036	415	2,950	57	107	25	40		304,500

[1] No institutes held.

[2] No report.

Special institutes, including movable schools, railroad specials, independent and round-up institutes, picnics, fairs, conventions, and field demonstration meetings for the year ended June 30, 1913.

State or Territory.	Movable schools.			Railroad specials.					Independent institutes.			Round-up institutes.			Picnics, fairs, conventions, etc.			Field demonstration meetings.				Total attendance.
	Number.	Days.	Attendance (registered).	Number.	Stops	Miles.	Number of lectures.	Attendance.	Number.	Sessions.	Attendance.	Number.	Sessions.	Attendance.	Number.	Sessions.	Attendance.	Number.	Number of experts.	Days of service.	Attendance.	
Alabama													84	900								900
Alaska [1]																						
Arizona				1	27	2,216	14	28,000				1	26	1,898					1	72		29,898
Arkansas	2	12	840	2	41		9	26,972							2	12	450					28,262
California				2	74	1,000	5	21,577	4	10	6,800	1	1	2,500					3	100		30,877
Colorado	4	20	288	2	101	3,036	18	42,489														42,777
Connecticut												1	1	200	1	8	1,000					1,200
Delaware				1	15	300	9	1,492														1,492
Florida									4	6	3,530				10	37	2,241		7	15		5,771
Georgia	52	104	4,652						52	52	3,222				5	8	1,000		70	14,000		8,874
Hawaii [2]																						
Idaho	30	120	6,543																2	600		6,543
Illinois															3	36	15,000					15,000
Indiana												1	6	330								330
Iowa																						
Kansas	7	42	152	1	13	125	6	2,700	67	67	6,000				1	14	1,000		14	1,267		9,852
Kentucky															11		3,300					3,300
Louisiana [1]																						
Maine															57	59	4,497					4,497
Maryland				1	30	513	10	2,684														2,684
Massachusetts															2	8	1,250		4	25		1,250
Michigan	1	4	862	1	11	261	5	1,150				1	10	5,193								7,205
Minnesota	9	100	4,000						158	477	77,306											81,306
Mississippi				3	80	450	3	20,350	3	45	4,500	1	15	1,200								26,050
Missouri																						
Montana	7	40	119	1	35	1,500	20	1,800							7		8,200		2	100		10,119
Nebraska	30	150	3,182												30	74	10,913		4	1,200		14,095
Nevada [1]																						
New Hampshire												1	3	500	1	2	2,000					2,500
New Jersey												4	10	4,730			2,000		2	600		6,730
New Mexico				2	63	3,124	260	20,500														20,500
New York															102	122	10,059		10	200		10,059
North Carolina				1	17		8	5,788		58	6,580	1	7	2,000	1	12	35					14,403
North Dakota															10	19	11,545					11,545
Ohio									100	300	75,000											75,000
Oklahoma	5	187	28,000						321	321	8,260	38	76	62,500								98,760

Oregon	1	6	330	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	68	74	11,634	.....	.....	.....	.....	11,964
Pennsylvania	4	19	6,688	.....	.....	.....	.....	.....	.....	.....	.....	1	10	5,000	11	50	7,885	.....	.....	.....	.....	.....	19,573
Porto Rico [2]	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Rhode Island	.....	.....	.....	.....	.....	.....	.....	.....	29	30	1,650	1	5	1,200	.....	.....	.....	.....	3	150	.....	.....	2,850
South Carolina	.....	.....	.....	.....	.....	.....	.....	.....	30	.....	5,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5,000
South Dakota	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tennessee	.....	.....	.....	1	212	6,300	10	200,000	.....	.....	.....	3	18	9,000	.....	.....	.....	.....	.....	.....	.....	.....	209,000
Texas	.....	.....	.....	5	250	5,000	40	109,100	.....	.....	.....	8	8	3,300	24	24	1,200	.....	3	250	.....	.....	113,600
Utah	35	145	[3] 29,981	1	24	900	5	16,921	.....	.....	.....	2	85	17,850	.....	.....	.....	.....	5	15	.....	.....	64,752
Vermont [2]	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Virginia [2]	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Washington [2]	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
West Virginia	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wisconsin	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	14	4,099	.....	.....	.....	.....	.....	.....	.....	.....	4,099
Wyoming	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	187	949	85,637	25	993	24,725	422	501,523	768	1,366	197,848	66	379	122,400	346	559	95,209	.....	130	18,594	.....	.....	1,002 617

[1] No institutes held. [2] No report. [3] Estimated.

Comparative statement of farmers' institutes.

State or Territory.	Appropriation.			Number of sessions.		Number of institutes.			Attendance.		
	1910–11	1911–12	1912–13	1911–12	1912–13	1910–11	1911–12	1912–13	1910–11	1911–12	1912–13
Alabama	$1,300.00	$1,600.00	$1,600.00	54	44	28	33	25	3,681	5,115	5,049
Alaska [1]											
Arizona	1,381.24	1,650.00	2,898.88	124	18	51	63	9	6,779	9,356	22,131
Arkansas	5,000.00	4,000.00	4,200.00	426	48	69	213	24	11,091	25,541	3,830
California	10,750.00	15,000.00	15,000.00	272	375	103	107	160	34,038	37,003	39,718
Colorado	5,239.00	5,159.00	5,000.00	233	115	100	105	73	15,117	29,380	15,729
Connecticut	5,000.00	1,000.00	1,100.00	50	64	48	23	37	5,000	2,687	5,910
Delaware	1,050.00	950.00	2,000.00	58	64	24	20	21	8,930	8,540	9,366
Florida	7,500.00	8,000.00	7,500.00	64	186	113	36	87	20,060	4,748	18,143
Georgia	10,500.00	7,500.00	25,000.00	103	200	67	103	120	10,960	21,870	23,350
Hawaii [2]											
Idaho	4,111.10	5,000.00	5,000.00	74	173	41	42	57	8,991	11,607	12,092
Illinois	29,125.00	35,950.00	27,650.00	802	960	102	197	117	164,731	176,650	197,787
Indiana	19,750.00	18,750.00	23,300.00	1,201	1,389	382	372	418	201,580	174,758	225,496
Iowa	18,376.88	45,668.51	47,377.84	692	1,064	76	91	113	137,703	159,080	209,460
Kansas	15,000.00	18,000.00	24,085.00	902	1,011	300	342	498	58,504	95,786	87,290
Kentucky	15,000.00	16,000.00	21,500.00	341	320	212	119	79	78,790	10,474	17,200
Louisiana	1,100.00					32			4,800		
Maine	3,000.00	3,000.00	2,300.00	184	52	44	119	42	9,868	7,394	3,582
Maryland	6,000.00	6,000.00	6,000.00	134	153	55	54	58	13,960	18,535	21,492
Massachusetts	4,000.00	5,000.00	6,000.00	192	154	140	138	138	21,812	24,192	18,172
Michigan	8,500.00	10,000.00	8,900.00	1,218	2,234	491	445	474	141,433	131,234	138,964
Minnesota	20,985.00	26,054.37	26,625.00	665	477	218	226	158	114,746	119,182	77,306
Mississippi	10,000.00	17,900.00	8,700.00	398	610	205	233	362	46,830	45,242	121,026
Missouri	15,000.00	8,750.00	8,750.00	463	512	170	246	268	64,077	88,643	92,167
Montana	10,000.00	10,000.00	10,000.00	304	272	85	140	162	11,973	21,148	18,067
Nebraska	15,484.80	18,300.00	17,500.00	635	613	148	207	205	63,270	119,199	123,057
Nevada [1]											
New Hampshire	1,200.00	1,600.00	1,200.00	39	30	13	18	16	6,800	6,000	2,500
New Jersey	3,000.00	2,500.00	4,679.12	131	142	47	45	47	8,195	7,710	10,937
New Mexico			500.00	11			8			200	
New York	28,500.00	54,807.01	38,000.00	1,200	1,392	340	351	411	128,131	116,311	115,084
North Carolina	7,500.00	9,530.00	10,000.00	940	930	372	463	465	49,989	57,426	59,536
North Dakota	9,493.24	11,000.00	7,185.00	124	107	87	41	34	41,317	16,559	8,683
Ohio	22,000.00	31,400.00	28,716.76	1,705	1,830	323	341	346	376,185	397,545	398,215
Oklahoma	5,000.00	10,500.00	10,500.00	831	1,210	142	545	564	5,320	71,625	38,922
Oregon	3,000.00	6,100.00	2,500.00	115	113	33	72	97	18,520	10,633	13,229
Pennsylvania	25,500.00	25,500.00	22,500.00	1,046	1,012	221	226	210	162,809	154,841	128,008
Porto Rico [2]											
Rhode Island	430.18	600.00	700.00	32	36	23	27	29	2,640	2,595	2,800
South Carolina	11,197.27	3,500.00	2,500.00	329	210	78	183	105	27,000	3,210	35,000
South Dakota	10,469.76	13,000.00	16,000.00	481	799	116	178	397	13,100	55,246	85,957

Tennessee	5,000.00	5,000.00	.....	93	.....	42	81	.....	4,142	10,000	.....
Texas	5,000.00	17,500.00	20,510.17	744	1,235	292	714	1,108	23,360	44,982	327,008
Utah	6,000.00	11,000.00	10,775.00	466	187	49	250	103	5,945	66,208	9,523
Vermont	3,750.00	3,000.00	.....	68	.....	50	34	.....	7,660	8,269	.....
Virginia	5,000.00	.....	.....	.....	.....	55	.....	.....	6,000	.....	.....
Washington	8,500.00	10,000.00	.....	216	.....	34	68	.....	5,578	16,505	.....
West Virginia	8,000.00	8,203.20	6,332.02	510	520	88	102	104	26,100	37,543	43,052
Wisconsin	20,000.00	20,000.00	20,000.00	758	768	178	176	179	113,666	118,306	112,007
Wyoming	1,737.54	1,000.00	200.00	2	11	[2]	1	6	676	121	546
Total	432,693.47	533,972.09	510,784.79	19,430	20,640	5,889	7,598	7,926	2,291,857	2,549,199	2,897,391

[1] No institutes held.

[2] No report.

STATISTICS OF AGRICULTURAL EXTENSION, 1913.

Statistics of agricultural extension by the agricultural colleges of the United States for the year ended June 30, 1913.

NOTE.—The extension work of the agricultural colleges embraces those forms of instruction and other methods of disseminating information which are offered by the college to people who are not resident pupils of the institution.

[The farmers' institute in a considerable number of States is a distinct organization. Statistics relating to this form of extension are published each year in the annual report of the Office of Experiment Stations, and therefore are not included in these tables.]

State.	Extension staff.		Formal teaching.																	
			In movable schools.				In correspondence schools.				In rural study clubs.				In normal schools.				In high schools.			
	Number engaged.	Sum of percentages of time contributed by all workers.	Number giving instruction.	Days of service.	Persons taught.		Number giving instruction.	Days of service.	Persons taught.		Number giving instruction.	Days of service.	Persons taught.		Number giving instruction.	Days of service.	Persons taught.		Number giving instruction.	Days of service.	Persons taught.	
					Registered in classes.	Not registered.			Registered in classes.	Not registered.			Registered in classes.	Not registered.			Registered in classes.	Not registered.			Registered in classes.	Not registered.
Colored [1]																						
Alabama	5	500																				
Alaska [2]																						
Arizona																						
Arkansas [2]																						
California	9	750					3	900	150		1	300		450	1	2		300	5	20		5,908
Colorado [1]																						
Connecticut	2	200	2	30	60																	
Delaware	5	192																				
Colored	5	100																				
Florida	7	258					5	200	131		17	165	3,300	3,090								
Georgia	13		20	421	4,652																	
Hawaii [3]																						
Idaho	14	484	13	90	3,963	2,000		35	2,580	500	2	10	100		1	20	1,200					
Illinois	5	450	12	72	6,000	4,000																
Indiana	9	900	10	600	14,020																	
Iowa	24	1,903	28	1,764	21,600	8,000	2	150	2,000		2	80	3,000		5	105	2,400		8	320	4,000	1,500
Kansas	28	2,700	7	42	152		2		317													

Colored																						
Kentucky	11	480	5	44	800														3	21		
Louisiana			33	23		830																
Maine	14	531	5	29	375	80	7			150												
Maryland [1]																						
Massachusetts	12	800	5	40	800	423	15		597										1			
Michigan	7	650					2		150										12	180	890	500
Minnesota	14	1,200	9	100	4,000																	
Mississippi	24	1,121													4	22	1,950		3	11	800	
Missouri	11	1,100		135	648														1	365		
Montana	3		1	20	62														40			
Nebraska	13	1,000	30	150	3,182																	
Nevada [1]																						
New Hampshire							6		207													
New Jersey	4	360																				
New Mexico	1	50																				
New York	10	1,000	16	144	1,188																	
Colored	2	330																				
North Carolina	5	266																				
North Dakota	15	450	10	75		6,000																
Ohio	19	1,392	11	240	6,241																	
Oklahoma	6	600	14	390		16,566									10	84	3,401		6	16		7,875
Oregon	7	633	3	27	330		3	30	31						1	2		295	7	9		974
Pennsylvania	2	200																				
Porto Rico	5	270	2	250	2,500		2	250	1,200													
Rhode Island	2	150													1	7	133		11		30	
Colored	6	150																				
South Carolina [3]																						
South Dakota [1]																						
Tennessee	8	79	9	48	952																	
Texas	9	825	8	14	113	20	13	300	226													
Utah	9	700	7	160		40,273	15	24	60		2	72	13,225									
Vermont [1]																						
Colored	9	113																				
Virginia [1]																						
Washington [2]																						
West Virginia	12	818	9	28	214						2	600	44									
Wisconsin	33	1,712	27	500	467	22,061																
Wyoming																						
Total	399	25,417	296	5,436	72,319	100,253	75	1,889	7,649	650	26	1,227	19,669	3,540	23	242	9,084	595	97	942	5,720	16,757

[1] No extension work. No report. [3] No data.

Statistics of agricultural extension by the agricultural colleges of the United States for the year ended June 30, 1913—Continued.

State.	Informal teaching.															
	As local advisers.				As itinerant lecturers.				In educational train work.				In rural club work.			
	Number engaged.	Days of service.	Number of places visited.	Number of persons in attendance.	Number engaged.	Days of service.	Number of places visited.	Number of persons in attendance.	Number engaged.	Days of service.	Number of places visited.	Number of persons in attendance.	Number engaged.	Days of service.	Number of places visited.	Number of persons in attendance.
Colored [1]																
Alabama																
Alaska [2]																
Arizona																
Arkansas [2]																
California	5	125	175	2,500					5	105	74	21,577	1	300	8	450
Colorado [1]																
Connecticut					11	96	75	6,500								
Delaware									1	6	50	10,000				
Colored													1			
Florida	5	8	22						3	3	2	75	17	150	34	6,390
Georgia					23	795	479	42,370					24	985	1,007	83,551
Hawaii [3]																
Idaho	8		200	1,000	2	30	30	3,000					1	20	20	1,000
Illinois													1	150		
Indiana	4	1,200			10		100	12,000	9	90	113	10,722				
Iowa	8	320	185		18	1,980	800	130,000	8	40	95	21,000	6	180	75	6,000
Kansas	8	400	656	2,239	[4] 36	848	816	100,135	6		13	2,700				
Colored																
Kentucky	4				4								5			
Louisiana									13	8	21	16,250				
Maine					10	350	221	21,000					1	20	16	1,800
Maryland [1]																
Massachusetts	4				40			30,219					1			
Michigan	5				5				5				6			
Minnesota	15												2			
Mississippi	7	69	35		4	180	135	13,500	3	18	80	20,350	1	313	114	10,000
Missouri	8				27	135	70	14,000	5	65	50	92,800	1	75		
Montana	2	100							20	12	35	18,000	2			
Nebraska	30				52	700	205	123,057					7			
Nevada [1]																
New Hampshire					14		52	4,081								
New Jersey																
New Mexico									8	150	63	20,500	1			
New York	14	442	387	149	55	333	296	26,773	8	14	24	4,295	7	23	20	826

Colored	2				2	30	20	3,000								
North Carolina	16	36							4	17	28	10,000	3	750		
North Dakota					15								2	50	30	
Ohio					17		490		11	25	121	20,000				
Oklahoma					14	78	78	28,267	15	412	119	70,970	7	427	656	35,790
Oregon	1	158			44	352	102	27,218					1	2		120
Pennsylvania	8								5	2	12	1,000				
Porto Rico																
Rhode Island	2				2								2			
Colored	6	90	23	2,000	2	60	15	5,000								
South Carolina [3]																
South Dakota [1]																
Tennessee					5				5				1			
Texas	125				6				16	50	140	100,000	2	600		18,000
Utah					8	187			3	23	24	16,921	2	200		
Vermont [1]																
Colored	2															
Virginia [1]																
Washington [2]																
West Virginia	4	547	250				28	450	9	3	77	2,134	2	325	77	15,206
Wisconsin	5	1,500							13	150	103	32,225	6			
Wyoming																
Total	298	4,995	1,933	7,888	426	6,154	4,012	590,570	175	1,193	1,244	491,519	113	457	2,057	179,133

[1] No extension work. [2] No report. [3] No data. [4] Work of 18 institute lecturers included.

Statistics of agricultural extension by the agricultural colleges of the United States for the year ended June 30, 1913—Continued.

State.	Informal teaching.															
	In demonstration work.												In other extension service.			
	In fields.				In animal husbandry.				In home economics.							
	Number engaged.	Days of service.	Number of places visited.	Number of persons in attendance.	Number engaged.	Days of service.	Number of places visited.	Number of persons in attendance.	Number engaged.	Days of service.	Number of places visited.	Number of persons in attendance.	Number engaged.	Days of service.	Number of places visited.	Number of persons in attendance.
Colored [1]																
Alabama																
Alaska [2]																
Arizona																
Arkansas [2]																
California	1	300	20	2,500	1	300	20	2,500								
Colorado [1]																
Connecticut	3	30	8	480									10	45	5	
Delaware	4	120	75													
Colored	1	200														
Florida	6	6	5	115					1	7	7	1,726	5	21	3	585
Georgia	70	14,000	42,000	210,000	1	150	45	270	14	382	360	12,400				
Hawaii [3]																
Idaho	3	225	225	2,025	2	225	290		1	30	20	400	2	20	15	
Illinois			35													
Indiana	3	79	79	5,954	3	21	7	125	2	103	44	18,247	10	408	35	502,573
Iowa	8	160	60	8,000	3	120	40	6,000	3	330	107	13,000	8	480	150	18,000
Kansas													9			
Colored													3	2	2	114
Kentucky	4				1				3							
Louisiana																
Maine	4	1,200														
Maryland [1]																
Massachusetts	3				3											
Michigan	4				1											
Minnesota	3				1				3							
Mississippi	2	27	22		1	8	8									
Missouri	2				14	111	42	303,550					5	68	61	251,500
Montana	2															
Nebraska	5	1,500														
Nevada [1]																
New Hampshire	4	14	14	7,780	4				1							2,235

New Jersey																
New Mexico																
New York	4	91	20		6	28	16	157	11	4	4	155	245	994	1,248	285,000
Colored	1	300														
North Carolina																
North Dakota																
Ohio	3	148	148	3,469	1	18	18		5	45	22					
Oklahoma	1	4	3	119									37	215	95	1,358
Oregon	3	8	2	250					1	5	1	450	23	119	30	12,287
Pennsylvania																
Porto Rico																
Rhode Island													2			
Colored	1	30	8	42	1	45	12	74	1	60	10	108				
South Carolina [3]																
South Dakota [1]																
Tennessee	1															
Texas																
Utah					6	1,650			1	275						
Vermont [1]																
Colored																
Virginia [1]																
Washington [2]																
West Virginia																
Wisconsin	11				7				3							
Wyoming																
Total	157	18,442	42,724	240,734	56	2,676	498	312,676	50	1,241	575	46,486	359	2,372	1,644	1,073,652

[1] No extension work. [2] No report. [3] No data. [4] Work of 18 institute lecturers included.

Statistics of agricultural extension by the agricultural colleges of the United States for the year ended June 30, 1913—Continued.

State.	Publications issued.								Finances.					
	Press bulletins.		Bulletins and leaflets of information.		Courses of study for movable and correspondence schools.		Outlines of forms of organization and of reports.		From State appropriation.	Contributed locally.	From other sources.	Total.	Cost of extension department last year.	Appropriation for coming year.
	Number.	Pages.	Number.	Pages.	Number.	Pages.	Number.	Pages.						
Colored [1]									$5,000.00		$9,180.00	$14,180.00	$14,180.00	$14,180.00
Alabama														
Alaska [2]														
Arizona														
Arkansas [2]														
California			8	64	1	200	1	10	15,000.00			15,000.00	15,000.00	25,000.00
Colorado [1]														
Connecticut									2,500.00		700.00	3,200.00	3,200.00	5,000.00
Delaware									4,500.00			4,500.00	4,500.00	5,000.00
Colored	4	60	1	24	1	5			200.00	$500.00		200.00	8,000.00	11,500.00
Florida	18	36							7,500.00			8,000.00		
Georgia					1	30	1	6	40,000.00	7,175.00		47,175.00	47,175.00	
Hawaii [3]														
Idaho									6,000.00	500.00		6,500.00	6,500.00	12,500.00
Illinois	24								20,000.00			20,000.00		20,000.00
Indiana	47	47	38	281			3	77	40,000.00	11,764.57	14,624.76	66,389.33	61,388.12	40,000.00
Iowa			102,000						51,500.00	26,000.00	3,000.00	80,500.00	64,500.00	91,400.00
Kansas	7				100				40,000.00			40,000.00	40,000.00	45,000.00
Colored	26	26	8	56			1		15,000.00	5,600.00	3,125.00	23,725.00	23,725.00	15,000.00
Kentucky														
Louisiana														
Maine	10	40	12	96							9,800.00	9,800.00	9,800.00	10,800.00
Maryland [1]														
Massachusetts			41		17	1,005			50,000.00		4,267.00	54,267.00	17,814.85	
Michigan					1	20			12,566.00	11,000.00		23,566.00	23,566.00	
Minnesota	24	24	9						42,000.00			42,000.00		65,000.00
Mississippi									7,500.00	1,200.00	20,900.00	29,600.00	29,600.00	
Missouri	25	25							72,250.00	16,000.00	700.00	88,950.00		
Montana									1,000.00			1,000.00	1,000.00	
Nebraska									17,500.00		4,000.00	21,500.00	21,500.00	25,000.00
Nevada [1]														
New Hampshire	18	18	5	40	1	1			3,250.00			3,250.00	3,250.00	10,750.00
New Jersey	4		8	65										
New Mexico			1	20			3	3			500.00	500.00		
New York	12	48	55	1,602					50,000.00			50,000.00	50,000.00	70,000.00

Colored									1,200.00	600.00	7,000.00	8,800.00	8,800.00	
North Carolina														
North Dakota			4	94					6,000.00	1,185.00	7,500.00	14,685.00		26,000.00
Ohio	25	50	20	320			8	8	40,000.00			40,000.00	40,000.00	35,000.00
Oklahoma			26	186					10,350.00			10,350.00	10,350.00	13,800.00
Oregon	52	52	1	11					2,500.00			2,500.00	2,500.00	32,500.00
Pennsylvania	4		6	24					11,000.00	9,100.00	900.00	21,000.00	21,000.00	14,180.00
Porto Rico			2						12,000.00			12,000.00	12,000.00	
Rhode Island			15	90					3,000.00	500.00	500.00	4,000.00	4,000.00	3,000.00
Colored	2	108											277.69	
South Carolina[3]														
South Dakota[1]														
Tennessee	2	2	3	82						880.00		880.00		
Texas			8	12					9,000.00	60,000.00	63,875.00	132,875.00	132,875.00	20,000.00
Utah	20	20	8	120			2	20	10,000.00			10,000.00	10,000.00	16,000.00
Vermont[1]														4,000.00
Colored		4									3,111.87	3,111.87	3,111.87	4,725.00
Virginia[1]														
Washington[2]														
West Virginia	30	100	8	256	7	14			15,000.00	4,000.00	7,500.00	26,500.00	21,500.00	30,000.00
Wisconsin	52	416	32		70				40,000.00	4,400.00	5,600.00	50,000.00	50,000.00	50,000.00
Wyoming	7	7												3,500.00
Total	413	1,079	102,323	3,443	199	1,275	19	124	663,316.00	160,404.57	166,783.63	990,504.20	761,113.53	718,835.00

[1] No extension work.

[2] No report.

[3] No data.

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